

RAKARJ16 915MHz Black Blade Antenna Datasheet

Overview

Features

- Frequency Range: 902~928 MHz
- Max Gain: 2.3 dBi
- VSWR: ≤ 1.5
- High efficiency
- Vertically polarized



Figure 1: RAKARJ16 Antenna Overview

Specifications

Model	RAKARJ16
Frequency Range	902 MHz~928 MHz
Peak Gain	2.3 dBi
VSWR	≤ 1.5
Efficiency	>80%
Feed Impedance	50 Ω
Polarization	Vertical
Cover Material(color)	Plastic(Black)
Connector Type	RP-SMA
Dimensions (mm)	$\Phi 13.0$ mm x 198.0 mm
Operation Temp (°C)	-30 °C ~ +75 °C
Humidity Range	5%~95%

S11 & VSWR

Frequency(MHz)	S11	VSWR
902 MHz	-18.3	1.28
928 MHz	-14.6	1.46

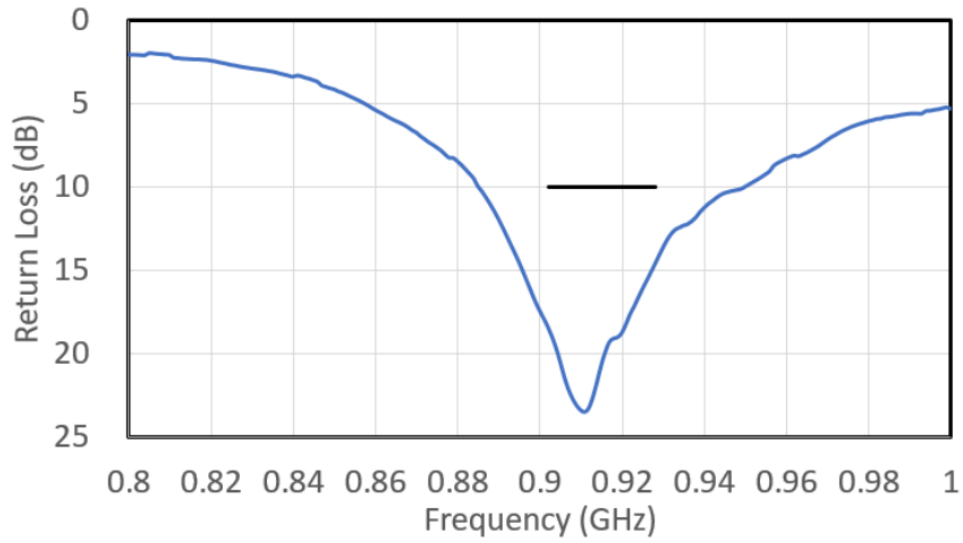


Figure 2: S11 & VSWR Graph

Peak Gain & Efficiency

Frequency (MHz)	Gain (dBi)	Efficiency (%)
902	2.3	82.6
904	2.2	82.3
906	2.2	82.7
908	2.3	84.0
910	2.3	85.0
912	2.3	85.7
914	2.3	86.0
916	2.2	86.1
918	2.2	85.9
920	2.2	86.0
922	2.2	86.4
924	1.9	85.9
926	1.9	85.1
928	2.1	85.5
Average	-	84.9

Radiation Patterns

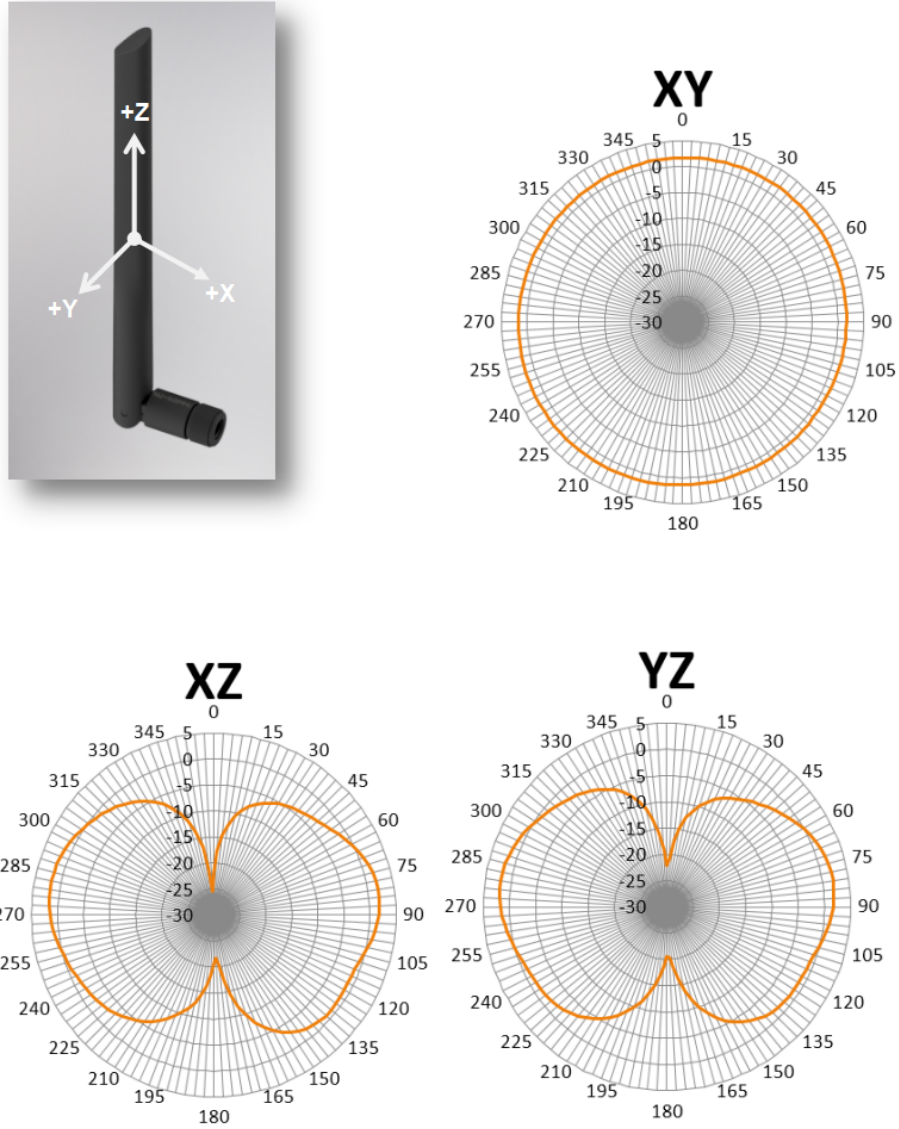


Figure 3: Radiation Patterns

Mechanical Characteristics

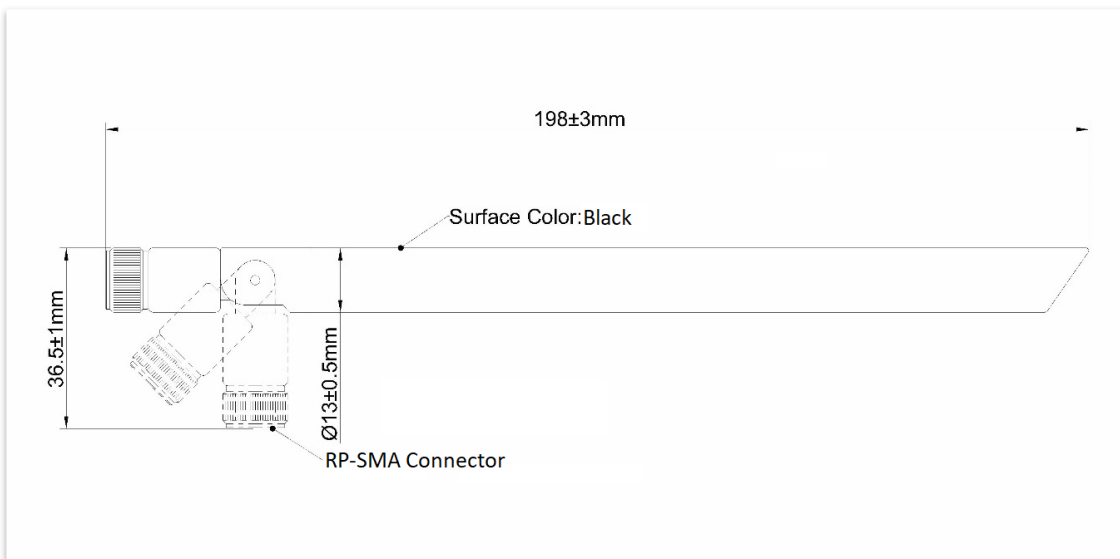


Figure 4: Mechanical Specifications